

**WHAT IS CLAIMED IS:**

1. A resin composition which is used to form a sheet-shaped prepreg by being impregnated into a base material, the resin composition comprising:

a first thermosetting resin having a weight average molecular weight;

a second thermosetting resin having a lower weight average molecular weight than that of the first thermosetting resin;

a curing agent; and

a filler.

2. The resin composition as claimed in claim 1, further comprising a resin of which moisture absorption is lower than that of both of the first thermosetting resin and the second thermosetting resin.

3. The resin composition as claimed in claim 1, wherein the first and second thermosetting resins include epoxy resin or cyanate resin.

4. The resin composition as claimed in claim 1, wherein the weight average molecular weight of the first thermosetting resin is equal to or more than 2,000.

5. The resin composition as claimed in claim 1, wherein the weight average molecular weight of the second thermosetting resin is equal to or less than 1,500.

6. The resin composition as claimed in claim 1, wherein at least one of the first and second thermosetting resins contains cyanate resin.
7. The resin composition as claimed in claim 6, wherein the cyanate resin is a novolak-type cyanate resin.
8. The resin composition as claimed in claim 1, wherein at least one of the second thermosetting resin and/or the curing agent is in a liquid state at room temperature.
9. The resin composition as claimed in claim 1, wherein the filler is an inorganic filler in powder form.
10. The resin composition as claimed in claim 1, wherein the filler is silica.
11. The resin composition as claimed in claim 1, wherein the filler is in powder form and the average particle size of the filler is equal to or less than 2  $\mu\text{m}$ .
12. The resin composition as claimed in claim 1, wherein the content of the filler is 40 to 80 wt% of the total weight of the resin composition.
13. A prepreg formed by impregnating a base material with the resin composition claimed in claim 1.
14. The prepreg as claimed in claim 13, wherein the reaction rate of the resin composition in the prepreg is equal to or less

than 30 %.

15. The prepreg as claimed in claim 13, wherein the base material is a spread-out glass fiber base material.

16. The prepreg as claimed in claim 13, wherein the base material is a nonwoven fabric made of organic fibers.

17. A prepreg formed by laminating a metallic foil on at least one of the surfaces of the prepreg as claimed in claim 13.

18. A laminate formed by laminating a metallic foil on at least one of the surfaces of the prepreg claimed in claim 13 and molding them by heating under pressure.

19. A semiconductor package manufactured by mounting at least one IC chip on the prepreg claimed in claim 17.